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**Mail Stop Appeal Brief - Patents** 

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Rupert B. Hurley Jr.

DATE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors:

POLLOK, K.D., et. al.

Group Art Unit: 3728

Serial No.:

09/917,077

Examiner: Bui, Luan Kim

Filing Date:

July 27, 2001

Attorney Docket No.: D-43379-01

Title: COOK-IN PATCH BAG AND PROCESS FOR USING SAME

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### **APPEAL BRIEF UNDER 37 CFR § 41.37**

Sir:

This Appeal Brief is being filed further to the Notice of Appeal mailed 29 July 2006 (received in the Mail Room on 31 July 2006), with the period for filing of the brief being extended three months, i.e., through January 2, 2007 (as 31 December 2006 fell on a Sunday and Monday, Jan. 1, 2007 is a federal holiday), by the concurrently filed request for a 3-month extension of time. As this brief is being filed on 2 January 2007, no further extension is believed to be necessary. However, in the event that a further

extension of time is deemed to be necessary, the undersigned authorizes the Commission to charge Deposit Account 07-1765 in the appropriate amount.

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#### (1) Real Party in Interest

The real party in interest is Cryovac, Inc., assignee of the above-referenced patent application.

### (2) Related Appeals and Interferences

There are no other appeals, interferences or judicial proceedings known to Appellant, Appellant's legal representative, or Assignee which may be related to, directly affect, be directly affected by, or have a bearing on the Board's decision in the pending appeal.

#### (3) Status of Claims

The pending claims are claims 1-25. However, Claims 1-11 and 18 have been withdrawn from consideration as being directed to a non-elected species. Therefore, the claims involved in this appeal are Claims 12-17 and 19-25, all of which stand rejected. The Appendix below provides a copy of all of the claims involved in this appeal.

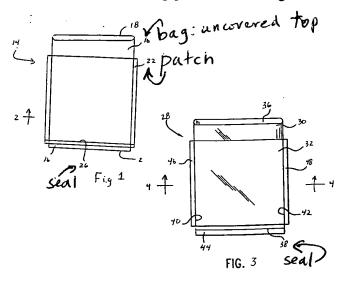
#### (4) Status of Amendments

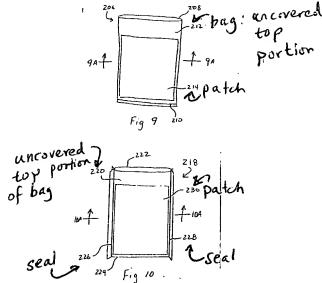
An Amendment under 37 CFR 1.116 was filed 28 July 2006. The amendment was entered, as noted on the Advisory Action mailed 16 August 2006.

### (5) Summary of the Claimed Subject Matter

The claimed subject matter is directed to a patch bag comprising a bag having a patch adhered thereto. [See FIG. 1, FIG. 2, FIG 3, FIG. 4, FIG 9, FIG 9A, FIG 10, FIG. 10A, and see Page 3 lines 2-3.] The bag is made from a first film and the patch is made from a second film, and the first film is adhered to the second film with an adhesive. [See FIG. 1, FIG. 2, FIG 3, FIG. 4, FIG 9, FIG 9A, FIG 10, FIG. 10A, and see Page 3 lines 3-4.] The bag has a heat seal capable of withstanding a temperature of at least 70°C for a period of at least 4 hours. [See Page 5 lines 7-9.] The patch is adhered to the bag with an adhesive capable of maintaining adhesion of the patch to the bag at a temperature of at least 60°C for a period of at least 4 hours. [See Page 5 lines 9-12.] The patch does not cover a portion of the bag between the patch and the open top of the bag. [See FIG. 1, FIG. 3, FIG. 9, and FIG. 10, and Page 4 lines 6-8.]

FIG 1, FIG 3, FIG 9, and FIG 10 each represents a different embodiment of a patch bag. Each embodiment has a patch film adhered to a bag film with an adhesive, i.e., a glue. To facilitate comprehension, below are reproduced FIG 1, FIG. 3, FIG. 9, and FIG. 10, with labels added designating the patch film, the bag film, any heat seal of the bag film to itself, and the uncovered top portion of the bag.





#### (6) Grounds of Rejection to be Reviewed on Appeal

- I. Whether Claims 12-14, 16, 17, 24, and 25 Are Obvious over WILLIAMS et al(USPN 5,540,646) in view of OBERLE (USPN 4,855,183) or RAMESH (6,346,285)
- II. Whether Claim 15 Is Obvious over WILLIAMS et al in view of OBERLE or RAMESH, further in view of SASANO et al (EP Pub. No. 0,622,437)
- III. Whether Claims 19-23 Are Obvious over WILLIAMS et al in view of OBERLE or RAMESH, further in view of BRADY et al (5,545,419)

## (7) Argument

#### I. Framing the Claimed Invention in the Context of the Prior Art

The invention on appeal is directed to a specific type of packaging bag, which is commonly referred to as a patch bag. A patch bag has a bag comprising a bag film and a patch comprising a patch film. The patch film is separate from the bag film until the patch film is adhered to the patch film with an adhesive.

In Appellants' claimed invention, the patch film is not just a layer of a coextruded multilayer bag film. Rather, it is a separate piece of film. This is apparent because Appellants' independent Claim 12 recites "...the patch does not cover a portion of the bag between the patch and the open top of the bag." This uncovered area is present in each of FIGs. 1, 3, 9, and 10 provided in the Summary above. The difference in size between the patch film and the bag film necessitates that the patch film is a different piece of film than the bag film, rather than simply a layer of a coextruded bag film.

While patch bags have been around for about 20 years, their primary use has been for the packaging of fresh bone-in meat products, particularly refrigerated bone-in meat products. Bone ends are highly abusive, with shipping and handling having the potential to cause a bone end to puncture the package, which of course produces a leaking package with enhanced opportunity for contamination or degradation of the meat within the package, as well as spillage of liquid from the punctured bag. The patch film makes it more difficult for a bone end to puncture the package.

Before the filing date of the present application, commercially-available patch bags have included two different ways of adhering the patch film to the bag film. First, the dominant patch bag in the marketplace has been marketed by Cryovac, Inc. This

patch bag has utilized an acrylic emulsion adhesive to adhere the patch to the bag.

Appellants have discovered that the acrylic emulsion adhesive does not survive typical cook-in conditions, and that as a result the patch delaminates from the bag during cook-in conditions. See Page 3 lines 4-6 of Appellants' specification.

The other commercially-available patch bag has been marketed by Curwood, Inc., and has utilized corona treatment of the patch and/or bag to cause the patch film to electrostatically adhere to the bag film. However, no adhesive has been employed to generate adhesion in this bag. As with the patch bags from Cryovac, Inc., the primary use for the patch bags from Curwood, Inc. has been the packaging of fresh, bone-in meat products kept at refrigerated temperature.

As can be seen, Appellants use a different adhesive to adhere the patch to a cook-in bag:

The adhesive used to adhere the patch (or patches) to the cook-in bag must be capable of maintaining adhesion of the patch to the bag at a temperature of at least 97°C for a period of at least 10 minutes, more preferably for at least 20 minutes, and still more preferably for at least 45 minutes. Since cook-in processes are not all the same, alternatively the adhesive must be capable of maintaining adhesion of the patch to the bag at a temperature of at least 60°C for a period of at least 4 hours, more preferably for at least 7 hours, and still more preferably for at least 10 hours. A preferred adhesive which can meet all of the above criteria is a urethane-based adhesive. This preferred adhesive is formulated by mixing 99 weight percent of a urethane resin sold by Ashland Specialty Chemical Company of Columbus, Ohio (a division of Ashland Inc.), under the trade name PURETHANE A-1078 CVAC resin with 1 weight percent of catalyst also sold by Ashland under the trade name C-CAT 104 catalyst. [Appellants' specification, Page 19 line 14 through Page 20 line 2.]

"Cook-in" is a term of art described in Appellants' specification:

The phrase "cook-in" as used herein refers to the process of cooking a product packaged in a material capable of withstanding exposure to long and slow cooking conditions while containing the food product, for example cooking at 57°C to 121°C (i.e., 135°F-250°F) for 2-12 hours, preferably 57°C to 95°C (i.e., 135°F-203°F) for 2-12 hours. Cook-in packaged foods are essentially prepackaged, pre-cooked foods which may be directly transferred to the consumer in this form. These types of foods may be consumed with or without warming. Cook-in packaging materials maintain seal integrity, i.e., any heat seals should maintain their integrity during cook-in, and are conformable to the contained food product. [Appellants' specification, Page 1 line 25 through Page 2 line 3]

Cook-in bags have been in commerce for at least 20 years. Cook-in bags are typically end-seal bags or side-seal bags in which the inside layer of a multilayer tubular film is sealed to itself and cut transversely to form a cook-in bag. However, the prior art of record does not teach or suggest placing a patch on a cook-in bag, not to mention how to adhere a patch to a cook-in bag so that the patch remains on the bag during the cook-in process. The dominant commercially-available patch bag has used an adhesive that is incapable of maintaining the adhesion of the patch to the bag during the cook-in process.

In summary, it is apparent that Appellants have invented and claimed a patch bag capable of cook-in end use without the patch delaminating from the bag, and without the seals failing the prior art does not teach a patch bag with a patch adhered to a bag with an adhesive capable of surviving cook-in conditions. Moreover, the prior art does not teach or suggest the use of a patch bag for packaging a product to be subjected to cook-in.

# II. Claims 12-14, 16, 17, 24, and 25 Are Patentable over WILLIAMS et al in view of OBERLE or RAMESH

Appellants contend that the final Office Action fails to set forth a prima facie case of obviousness of any one or more of Claims 12-14, 16, 17, 24, and 25 as obvious over WILLIAMS et al (USPN 5,540,646) in view of OBERLE (USPN 4,855,183) or RAMESH (USPN 6,346,285).

The Examiner has combined the patch bag teaching of WILLIAMS et al with the cook-in bag teaching of OBERLE et al or the cook-in bag teaching of RAMESH, in an attempt to arrive at Appellants' claimed invention. The Examiner relies on multilayer cook-in bag films disclosed in OBERLE or RAMESH as providing both the bag film and the patch film. The Examiner states that OBERLE discloses a cook-in bag film having layers A/B/C/D and outer patch layer (E) adhered to layer D by adhesive layer C (citing Column 10 lines 45 through Column 14 of OBERLE), with the Examiner further stating "The inner layers are considered equivalent to the bag as claimed and the outer layer is considered equivalent to the patch as claimed." The Examiner turns to RAMESH with the same type of analysis, i.e., a multilayer coextruded film having an adhesive layer with the outer layer being considered to be the "patch" and the adhesive layer (i.e., tie layer) being considered to be the "adhesive". From this position, the Examiner concludes that it would have been obvious to modify the patch bag of WILLIAMS by substituting the WILLIAMS patch bag with the cook-in bag film of OBERLE or RAMESH, so that the result is a "patch bag" with a patch (i.e., outer film layer of OBERLE or RAMESH) "adhered" to the bag with an "adhesive" (i.e., tie layer of the multilayer, coextruded bag films of OBERLE or RAMESH) capable of maintaining adhesion of the patch to the bag during cook-in conditions.

In response, Appellants again respectfully point out that the only independent claim on appeal, i.e., Claim 12, recites "... wherein the patch does not cover a portion of the bag between the patch and the open top of the bag." The outer layer of the coextruded cook-in film of OBERLE cannot possibly meet Appellants' recited "does not cover a portion of the bag" requirement for the patch. The Examiner considers the outer layer of the OBERLE film to be the "patch". Accepting the Examiner's reasoning, it necessarily must follow that the "patch" is present over the entire bag, not just a portion of the bag. This is because the cook-in bag film of OBERLE is coextruded. Again, see OBERLE at, for example, Column 8 line 46, Column 9 lines 25-26, 36, 38, 41, 56, and 63, Column 10 lines 6 and 7, Column 11 lines 48, 49, 51, and 54, Column 13 line 34, and Column 14 line 25. Clearly, OBERLE is teaching a coextrusion process. Those of skill in the art know that in a coextruded multilayer film, all layers are present at any given location of on the film. OBERLE does not teach or suggest applying a patch film to a bag film so that a portion of the bag film is not covered by the patch film, as recited in amended Claim 12 set forth above. As a result, it is clear that substituting the coextruded multilayer cook-in film of OBERLE for the bag film in WILLIAMS et al does not arrive at Appellants' claimed patch bag "...wherein the patch does not cover a portion of the bag between the patch and the open top of the bag." Accordingly, WILLIAMS et al in view of OBERLE does not rise to a prima facie case of obviousness of any one or more of Appellants' Claims 12-14, 16, 17, 24, and 25.

In response to the rejection based on WILLIAMS et al in view of RAMESH,

Appellants note that the cook-in film of RAMESH is also a coextruded multilayer

cook-in film, in that the Examiner again is relying upon a "...multilayer structure

having inner layers 12, 14, 16, and 20 and an "outer/patch (18) adhered to layer 20 by an adhesive layer." See April 4 Final Office Action at Page 3. Thus, as with OBERLE, Appellants again respectfully point out that the only independent claim on appeal, i.e., Claim 12, recites "... wherein the patch does not cover a portion of the bag between the patch and the open top of the bag." The coextruded cook-in film of RAMESH cannot possibly meet Appellants' recited "does not cover a portion of the bag" requirement for the patch. Since the Examiner considers the outer layer of the RAMESH cook-in film to be the patch, it is once again apparent that this outer layer is present over the entire bag, not just a portion of the bag. As with OBERLE, the cook-in bag film of RAMESH is produced by coextrusion. See RAMESH at, for example, Column 11 lines 45 and 60, Column 12 lines 61 and 65, Column 18 lines 1 and 3, Column 19 line 47, etc.

The 4 April 2006 final Office Action does not state that RAMESH teaches or suggest applying a patch film to a bag film so that a portion of the bag film is not covered by the patch film, as recited in amended Claim 12 set forth above. Rather, the statements in the Office Action are to the effect that the outer layer of the film of RAMESH is the "patch" and therefore is present over the entire "bag film". As a result, it is clear that WILLIAMS et al in view of RAMESH does not establish a prima facie case of obviousness of any one or more of Claims 12-14, 16, 17, 24, and 25.

In addition to the reasons set forth above in support of the conclusion that the 4 April 2006 final Office Action fails to set forth a prima facie case of obviousness of Claims 12-14, 16, 17, 24, and 25 as obvious over WILLIAMS et al in view of OBERLE or RAMESH, Appellants further note that the 4 April 2006 final Office Action fails to refer to any teaching, suggestion, or motivation in either OBERLE or

RAMESH for the substitution of the cook-in bag film of OBERLE or RAMESH for the patch bag of WILLIAMS et al or even just for the bag of WILLIAMS et al. Rather, the 4 April 2006 Office Action simply "concludes" that it would be have been obvious to substitute the cook-in bag of OBERLE or the cook-in bag of RAMESH for the patch bag of WILLIAMS et al, without any mention of any reason set forth in either OBERLE or RAMESH for making this modification to WILLIAMS et al. The only apparent reason set forth is "...so the bag comprises a heat seal capable of withstanding a temperature of at least 70C for at least 4 hours" and so that the "patch [is] adhered to the bag with an adhesive capable of maintaining adhesion of the patch to the bag at a temperature of at least 60 degrees Celsius for a period of at least 4 hours to prevent the patch bag from falling apart during cook-in." See Page 4 of the 4 April 2006 final Office Action. Appellants respectfully point out that if these statements are the intended statements of motivation, it is motivation based on hindsight, because it is motivation found word-for-word in Appellants' specification and claims, not motivation present in the references relied upon in the rejection. This is yet another reason that the Office Action fails to set forth any reason why the 4 April 2006 final Office Action fails to set forth a prima facie case of obviousness of any one or more of Claims 12-14, 16, 17, 24, and 25 as obvious over WILLIAMS et al in view of OBERLE or RAMESH.

## III. Claims 15 Is Patentable over WILLIAMS et al in view of OBERLE or RAMESH, further in view of SASANO et al

In section 5 of the 4 April 2006 final Office Action, the Examiner rejects Claim 15 as obvious over WILLIAMS et al in view of OBERLE or RAMESH as applied to Claim 12 above, further in view of SASANO et al (EP Pub. No. 0,622,437). The Examiner notes that WILLIAMS et al fails to disclose polyurethane adhesive, but states that SASANO teaches a polyurethane adhesive having hot water resistance for packaging film end use, and on this basis concludes that it would have been obvious to modify the adhesive of WILLIAMS et al to prevent the bag from being pulled apart during cook-in.

In response, Appellants first point out that WILLIAMS et al in view of OBERLE or RAMESH fails to set forth a prima facie case of obviousness of Claim 15 for all of the reasons set forth under heading II, above. Appellants admit that SASANO et al discloses a urethane adhesive for use in packaging, the urethane adhesive providing "excellent in adhesive properties... and hot water resistance". See Abstract of SASANO et al. However, this disclosure in SASANO does not change the failure of the 4 April 2006 final Office Action to set forth any motivation to modify WILLIAMS et al by substituting the cook-in films of OBERLE or RAMESH for the patch bag of WILLIAMS. The hindsight motivation set forth in the 4 April 2006 final Office Action is based on Appellants' specification and claims, and the 4 April 2006 final Office Action fails to set forth any other legally effective motivation for modifying WILLIAMS et al with either OBERLE or RAMESH, and accordingly, the 4 April 2006 final Office Action does not set forth a prima facie case of obviousness.

Moreover, the 4 April 2006 final Office Action fails to set forth any motivation to substitute the urethane adhesive of SASANO et al for the acrylic emulsion adhesive of WILLIAMS et al. WILLIAMS et al is directed to patch bags used for the packaging of "bone-in cuts of both fresh and smoked or processed meat". These are not products to be subjected to the high temperature conditions of cook-in. See the Abstract of WILLIAMS et al. As such, the 4 April 2006 final Office Action fails to set forth any reason as to why one of ordinary skill in the art would have come to the conclusion that there would have been any useful advantage in substituting the urethane adhesive of SASANO et al for the acrylic emulsion adhesive disclosed in WILLIAMS et al. Any reliance on the cook-in conditions set forth in OBERLE and RAMESH for modification of these secondary references fails to take into account that the 4 April 2006 final Office Action has failed to set forth any motivation to modify the primary reference WILLIAMS et al with either of the secondary references OBERLE or RAMESH. Thus, as with Claims 12-14, 16, 17, 24, and 25, the 4 April 2006 final Office Action fails to set forth a prima facie case of obviousness of Claim 15.

# IV. Claim 19-23 Are Patentable over WILLIAMS et al In view of OBERLE or RAMESH, further in view of BRADY et al

In the 4 April 2006 final Office Action, the Examiner rejects Claims 19-23 as obvious over WILLIAMS et al in view of OBERLE or RAMESH as applied to Claim 12 above, further in view of BRADY et al (USPN 5,545,419). The office action relies upon WILLIAMS et al, OBERLE, and RAMESH as in the rejection of Claim 12 above, and relies upon BRADY et al for sealing though the bag and patch together, or for sealing through the bag alone.

In response, Appellants first point out that for all of the reasons set forth under

heading II, above, the 4 April 2006 final Office Action fails to set forth a prima facie case

of obviousness of Claim 12 over WILLIAMS et al in view of OBERLE or RAMESH.

Appellants admit that BRADY teaches making a primary seal through the bag and not the

patch, in combination with making a supplemental seal through both the bag and the

patch. See Abstract of BRADY et al. However, Appellants again note that WILLIAMS

et al as modified by OBERLE or RAMESH in the manner stated in the 4 April 2006 final

Office Action does not set forth a prima facie case of obviousness of Claim 12, and hence

does not set forth a prima facie case of obviousness of any one or more of Claims 19-23,

which depend (directly or indirectly) upon Claim 12.

Conclusion

Appellants respectfully submit that, for all of the foregoing reasons, Claims 12-17

and 19-25 are patentable over the art of record. Appellants respectfully request that the

rejection of Claims 12-17 and 19-25 be reversed.

Respectfully submitted,

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## (8) Claims Appendix

Claim 12: A patch bag comprising a bag having a patch adhered thereto, the bag having a heat seal capable of withstanding a temperature of at least 70°C for a period of at least 4 hours, the patch being adhered to the bag with an adhesive capable of maintaining adhesion of the patch to the bag at a temperature of at least 60°C for a period of at least 4 hours, wherein the patch does not cover a portion of the bag between the patch and the open top of the bag.

Claim 13: The patch bag according to Claim 12, wherein the adhesive is capable of maintaining adhesion of the patch to the bag at a temperature of 60°C for a period of at least 7 hours.

Claim 14: The patch bag according to Claim 12, wherein the adhesive is capable of maintaining adhesion of the patch to the bag at a temperature of 60°C for a period of at least 10 hours.

Claim 15: The patch bag according to Claim 12, wherein the adhesive comprises polyurethane.

Claim 16: The patch bag according to Claim 12, wherein the bag is made from a film having a total free shrink of at least 10 percent at 185°F, and the patch is made from a heat-shrinkable film having a total free shrink of at least 10 percent at 185°F.

Claim 17: The patch bag according to Claim 12, wherein the bag has a seal layer comprising at least one member selected from the group consisting of polyamide and polypropylene.

Claim 19: The patch bag according to Claim 12, wherein the seal is through the bag and not through the patch.

Claim 20: The patch bag according to Claim 12, wherein the seal is through the bag and through the patch.

Claim 21: The patch bag according to Claim 12, wherein the bag is an end-seal bag and the patch overhangs both side edges of the bag.

Claim 22: The patch bag according to Claim 21, wherein the seal is through the patch and the bag.

Claim 23: The patch bag according to Claim 21, wherein each lay-flat side of the side of the bag has a patch adhered thereto, with both patches overhanging both side edges of the bag, with overhanging portions of each of the patches being adhered to one another.

Claim 24: The patch bag according to Claim 12, wherein the bag is made from a film having a total free shrink of from 10 to 120 percent at 185°F, and the patch is made from a heat-shrinkable film having a total free shrink of from 10 to 120 percent at 185°F.

Claim 25: The patch bag according to Claim 12, wherein the bag is made from a film having a total free shrink of from 15 to 80 percent at 185°F, and the patch is made from a heat-shrinkable film having a total free shrink of from 15 to 80 percent at 185°F.

## (9) Evidence Appendix

For purposes of this appeal, no copies of any evidence submitted pursuant to \$\$1.130, 1.131, or 1.132, or any other evidence entered by the Examiner, is being relied upon by Appellants in this appeal.

## (10) Related Proceedings Appendix

The undersigned is not aware of any prior or pending appeals, interferences, or judicial proceedings known to appellant or the undersigned, which may be related to, directly affect, or be directly affected by, or have a bearing on, the Board's decision in the instant appeal.

